Message

From: Hannon, ED [US] (AS) [Edward.Hannon@ngc.com]
Sent: 3/6/2017 6:17:16 PM
To: Alvey, Robert [Alvey.Robert@epa.gov]
Subject: RE: Northrop-Grumman/Navy Bethpage and the rest of LI's groundwater

Thank you for the information.
I too will keep you apprised.
ed

From: Alvey, Robert [mailto:Alvey.Robert@epa.gov]
Sent: Monday, March 06, 2017 1:12 PM
To: Hannon, ED [US] (AS)
Subject: EXT :RE: Northrop-Grumman/Navy Bethpage and the rest of LI's groundwater

Hello again, Ed.

Thank you for sharing the actual report Northrop-Grumman had prepared as part of the public comments. I had read through many of the comment letters but had not seen some of the detailed figures from the modeling runs your consultant had prepared. I'll go through this on my own to get a better understanding.

I took a vacation day recently and attended a meeting held at Suffolk Water Authority offices in Islandia where a meeting was being held by NYSDEC and USGS to present some of the initial progress made by a NYSDEC funded effort to prepare a new comprehensive model that can be used to help address a number of issues pertaining to the resiliency and sustainability of all of Long Island's water. One slide I found to be sadly humorous from a personal perspective, and a good example of historical data. It was a gamma log from a deep boring made about 25 years ago near the south shore of Queens. The gamma indicated a high amount of chlorides near the soils/bedrock interface. There was a NYSDEC Well number (Q) associated with that and for many years people had assumed the chlorides may have been the result of leaking well casing. Recently, a geophysics expert took a new look at the log and realized it was never a completed well, but a boring which had been logged appropriately, then the boring formally sealed and abandoned. The chloride indication from the gamma can now be reinterpreted bringing the freshwater-saltwater interface at that point much further inland than had been assumed. I bring this up only because at that time I worked for Brooklyn Union Gas who had funded the drilling in an effort to research the possibility of installing deep bedrock gas storage caverns rather than above ground "holders".

The new model being developed will reduce the current uncertainties that result from the simple fact that there have been few actual borings and wells extending deep through all potions of the underlying LI soils into bedrock. I understand the goal is to incorporate as much available detail into the hydrogeologic framework as possible. Each new "grid" for overall computation may be refined to a 500' square with over 20 layers.

I am familiar with the current expanded effort NYSDEC is making as to the specific plume impacted in your area, but it is not something I can comment on. I've given some thought to if there are alternates that might be potentially considered as an effective means to prevent impacted groundwater from reaching the inlet to a few public supply wells further south. If I get that fleshed out a bit more, I'll discuss it with everyone.

Back to reading!

Thanks again

Rob Alvey

From: Hannon, ED [US] (AS) [mailto:Edward.Hannon@ngc.com]
Sent: Monday, March 06, 2017 12:01 PM
To: Alvey, Robert <Alvey.Robert@epa.gov>
Subject: RE: Northrop-Grumman/Navy Bethpage and the rest of LI's groundwater

Rob

Hope all is well with you!

Thank you for this update. Carol did send an email informing me about Lorenzo steeping into her role.

With your vast understanding of the South East Nassau County aquifer and Navy/NG site related activities it is imperative that you be kept in the loop. Therefore, I will continue to keep you updated with related data and activities. I hope the Navy will do the same.

With regards to GIS and modeling runs, we have amassed a comprehensive amount of information and ran several computer modeling runs. Let me know how my team can aid you with you HDR / Full Plume Containment assignment.

As you should have been made aware of Northrop Grumman engaged a long list of independent and contracted hydrogeological experts from across the United States to review the DEC 's HDR scenarios.

Both NG & Navy provided the DEC with comments (See attached) as well as conducted several technical meeting sessions with Deputy Commissioner Martin Brand and others. This ultimately resulted in the DEC re-evaluating HDR proposals and now running a new assessment.

I have attached NG comments. As you will see they are comprehensive. NG came away from those meetings with a few actions to assist the DEC in better quantifying the negative ramifications of the HDR scenarios such as salt water intrusion and depression of the aquifer anywhere from 28-32 inches, and to identify and quantify some of the ecological impacts. We are working those now.

Thank You
Ed Hannon
ESHM & Remedial Program Manager
Northrop Grumman
O – 516-575-2333
M – 516-353-4618

From: Alvey, Robert [mailto:Alvey.Robert@epa.gov]
Sent: Monday, March 06, 2017 11:06 AM
To: Hannon, ED [US] (AS)
Subject: EXT :Northrop-Grumman/Navy Bethpage and the rest of LI's groundwater

Hello Ed,

This is just a courtesy note regarding my role and continual collaborative efforts to address the complex groundwater and drinking water issues in Nassau County.
There have been a number of changes during the last 2 years of the people assigned various responsibilities from the different agencies involved. Tom Taccone retired from EPA and the replacement RPM for the EPA's Hooker-Ruco

Polymers site is Mike Negrelli. I've continued to be the assigned Hydrogeologist for the EPA site, and Steve Scharf has continued to be the assigned NYSDEC PM for the associated Bayer site at that address.

EPA's Kathryn McCabe as you know, replaced George Pavlou as R2 DRA, and continues the meetings with various stakeholders. Carol Stein, the EPA RPM is returning to EPA's RCRA division and Lorenzo Thantu will now be the primary EPA RPM contact. I've worked with Lorenzo a number of years, particularly on the nearby EPA Liberty Superfund site. I'll still be called on if needed to help with some of the hydrogeological issues.
I still follow the overall drilling and well installation progress in addition to the monitoring & operations reports.

One slightly related area that I'm tracking a bit is the development of the overall GIS based database Suffolk County Water Authority is putting together. Another is the NYSDEC/USGS efforts to prepare a new overall groundwater computer model. Both of these will eventually be helpful in addressing the complexity of groundwater throughout LI.

I appreciate the courtesy you have extended in the past to help provide information concerning the Northrop-Grumman activities.

Regards

Rob Alvey